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### BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/591,584

Filing Date: June 09, 2000 Appellant(s): DIETZ, PETER T **MAILED** 

JAN 2 3 2006

**GROUP 1700** 

Robert L. Showalter For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 11/25/2005 appealing from the Office action mailed 06/22/2005.

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### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

### (2) Related Appeals and Interferences

The statement of Related Appeals and Interferences contained in the brief is correct.

### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

### (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

### (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

### (8) Evidence Relied Upon

6,033,785	TANAKA et al	03-2000
6,013,722	YANG et al	01-2000
5,677,050	BILKADI et al	10-1997
5,118,540	HUTCHISON	06-1992

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4,157,417 MURPHY 06-1979

### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-5, 7-9, 11, 13, 17-21, 31-33, 38 and 39 are rejected under 35

U.S.C. 103(a) as being unpatentable over Hutchison et al (US 5,118,540) in view of

Murphy (US 4,157,417).

Hutchison discloses a reflective film mounted on a substrate having a layer construction as follows, a protective fluorocarbon film, a first layer of pressure sensitive adhesive, a silver layer, a biaxially oriented polyethylene terephthalate (PET), a second layer of pressure sensitive adhesive, a biaxially oriented PET, a third layer of pressure sensitive adhesive and a glass substrate (example 5 and figures 3 and 6). The biaxially oriented PET is about 38 microns thick (column 10, line 18) within the claimed range. The protective fluorocarbon film of Hutchison corresponds to the scratch resistant layer coating of the claimed invention. Hutchison discloses the protective fluorocarbon film serves to protect the laminate from damage through wear and tear (column 6, lines 45-48). Likewise, the protective film is scratch resistant. Hutchison discloses the reflective film having three PET layers (example 6). Hutchison is using the same acrylic pressure sensitive adhesive as Appellant (column 7, line 67), the modulus strength of the adhesive would be inherently present. Like material has like property. This is in line with In re Spada, 15 USPQ 2d 1655 (1990) which holds that products of identical chemical composition can not have mutually exclusive properties. The combination of examples 5, 7 and 8 of Hutchison discloses the laminate having a thickness greater

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than 5 mils meeting the specific range required by the claims. Hutchison teaches a layer of silver having a thickness of 1 to 1.5 microns. It is believed that the presence of the thin silver layer in the laminate does not necessarily cause the laminate completely non-transmissive to visible light but rather to reduce the visible light transmittance of the laminate. Since the claims are unspecific about the percentage of visible light transmission, Hutchison still reads on the claimed visible light transmittance. Hutchison teaches the reflective film suitable for solar energy applications (abstract). Hutchison does not specifically disclose the reflective film attached to window glass. Murphy, however, teaches the reflective film having been attached to window glass to reduce heat, glare of solar radiation to reduce heat, glare of solar radiation (abstract). This is important to the expectation of successfully practicing the invention of Hutchison and thus suggesting the modification. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the reflective film in combination with window glass motivated by the desire to reduce the heat and glare of solar radiation.

Hutchison does not specifically disclose the reflective film being capable of passing one or more of the tests as recited in the claims. However, it appears that the reflective film of Hutchison as modified by Murphy is structurally the same, and made of the same materials as the presently claimed laminate. The reflective film meets all the structural limitations, having the thickness within the claimed range. The reflective film is attached to the window glass by the acrylic pressure sensitive adhesive as disclosed by the present invention. Each biaxially oriented polyester film layer as disclosed by

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Hutchison has a thickness within the claimed range. The polyester films are bonded to each other by the pressure sensitive adhesive layer. The reflective film is light transmittance. Therefore, it is the examiner's position that the reflective film would be substantially inherently capable of passing one or more of the tests as recited in the claims. This is also in line with *In re Spada*, 15 USPQ 2d 1655 (1990).

Murphy fails to teach the window glass suitable for use in vehicular or architectural glazing element. It is recognized that "suitable for use in vehicular or architectural glazing element" is an intended use limitation. It has been held that a recitation with respect to the manner in which a claimed window glass is intended to be employed does not differentiate the claimed window glass from a prior window glass satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Mere recitation of "suitable for use in vehicular or architectural glazing element" impacts no definite structure to the claimed window glass and is therefore found inadequate to convey structure in any patentable sense.

Claims 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison et al (US 5,118,540) in view of Murphy (US 4,157,417) as applied to claim 1, in view of Tanaka et al (US 6,033,785).

Neither Hutchison nor Murphy discloses that the window glass is tempered.

Tanaka, however, teaches a glass pane comprising a glass plate and a multilayered film formed on the surface of the glass plate (column 2, lines 22-30). Tanaka also teaches that the glass plate is a tempered glass plate (column 5, lines 15-20). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention

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was made to employ the tempered glass window to which the reflective film is attached because glass is tempered for strength and safety.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison et al (US 5,118,540) in view of Murphy (US 4,157,417) as applied to claim 1 above, in view of Bilkadi et al (US 5,677,050).

Hutchison discloses a laminate 100 comprising a scratch-resistant fluorocarbon film 160 bonded to an acrylic pressure sensitive adhesive 150 (figure 1). Hutchison is silent as to the laminate comprising a scratch-resistant ceramer coating. Bilkadi teaches the retroreflective sheeting comprising a ceramer coating which exhibits high levels of impact resistance, stain resistance and hardness (abstract). This is important to the expectation of successfully practicing the invention of Hutchison and thus suggesting the modification. Bilkadi discloses that the ceramer coating works well on polyacrylics adhesive (column 4, lines 12-13). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the ceramer coating with the scratch-resistant fluorocarbon film of Hutchison motivated by the desire to obtain a coating that exhibits higher levels of impact resistance, stain resistance and hardness.

Claims 14, 15, 22 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison et al (US 5,118,540) in view of Murphy (US 4,157,417) as applied to claim 1 above, further in view of Yang et al (US 6,013,722).

Hutchison does not specifically teach the presence of a crosslinker in the attachable pressure sensitive adhesive. Yang, however, teaches a low haze acrylic

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emulsion pressure sensitive adhesive for use in optical articles comprising a cross-linking agent (column 4, lines 1-5). Yang teaches an adhesive coated film having a percent haze less than 2 % (table 1) within the claimed range. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated a cross-linking agent into the attachable pressure sensitive adhesive of the window film motivated by the desire to obtain a laminate that exhibits low haze when adhered to glass surface.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison et al (US 5,118,540) in view of Murphy (US 4,157,417) and Bilkadi et al (US 5,677,050).

Hutchison discloses a laminate having a construction in a following order: surface of solar energy/adhesive/polyester/polyester/adhesive/silver/adhesive/polyester (example 7). Hutchison teaches the polyester layer of the laminate being protected with a premask film prior to installation and during installation. Hutchison discloses the use of an acrylic pressure sensitive adhesive to bond the silver layer and the polyester. Hutchison is silent as to a scratch-resistant ceramer coating. Bilkadi supplies the missing feature. Bilkadi teaches a retroreflective sheeting having an abrasion resistant creamer coating (abstract). Bilkadi teaches that the ceramer coating works well on polyacrylics adhesive (column 4, lines 12-13). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the ceramer coating as taught in Bilkadi on the outer surface of the laminate motivated by

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the desire to provide the laminate with excellent in abrasion resistance and outdoor durability.

Hutchison does not specifically disclose the reflective film attached to window glass. Murphy, however, teaches the reflective film having been attached to window glass to reduce heat, glare of solar radiation to reduce heat, glare of solar radiation (abstract). This is important to the expectation of successfully practicing the invention of Hutchison and thus suggesting the modification. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the reflective film in combination with window glass motivated by the desire to reduce the heat and glare of solar radiation.

Murphy fails to teach the window glass suitable for use in vehicular or architectural glazing element. It is recognized that "suitable for use in vehicular or architectural glazing element" is an intended use limitation. It has been held that a recitation with respect to the manner in which a claimed window glass is intended to be employed does not differentiate the claimed window glass from a prior window glass satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Mere recitation of "suitable for use in vehicular or architectural glazing element" impacts no definite structure to the claimed window glass and is therefore found inadequate to convey structure in any patentable sense.

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### (10) Response to Argument

# Examiner's comments on HUTCHISON AND MURPHY AND CLAIMS 1-5, 7-9, 11, 13, 17-21, 31-33, 38 and 39.

The examiner respectfully wishes to point out that the difference between the present claims and the claims on first appeal (Appeal No. 2005-0244) is an additional intended use limitation "suitable for use in a vehicular or architectural glazing element". As such, the scope of the present invention is not distinguishable from the scope of the claims on the first appeal. Since the Board has affirmed rejections over Hutchison in view of Murphy, the examiner maintains that the rejections of the pending claims are sustained. Additionally, under the principles of *res judicata* and *collateral estoppel*, Appellant was not entitled to claims that were patentably indistinguishable from the claim lost in the first appeal.

Appellant argues that nowhere does Hutchison disclose or suggest using his film in combination with window glass for use in a vehicular or architectural glazing element. Appellant further argues that to use window glass to support the Hutchison film would be completely contrary to the scope of the Hutchison invention because Hutchison film reflects "solar radiation impinging on any part of the surface of the flexible reflective film". The examiner disagrees. As confirmed by the Board, Hutchison does teach some uv light transmitted by the thin layer of silver (column 2, lines 14-20, see page 6 of the 01/28/2005 Decision on Appleal). Therefore, in view of the teachings of Murphy, one skilled in the art would have been motivated to use the reflective film of Hutchison in

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combination with a window glass suitable for use in a vehicular or architectural glazing element motivated by the desire to reduce the heat and glare of solar radiation.

Appellant argues that one skilled in the art would not have been motivated to use the reflective film of Hutchison on the window glass of Murphy because the Hutchison reflective film construction would not permit enough visible light through the window suitable for use in a vehicular or architectural application. Appellant states that any vehicle that had its windows covered with Hutchison reflective film construction would be a danger to the occupants because the driver's ability to see through the windows would be significantly impaired. The arguments are not found persuasive for patentability because they are not commensurate in scope with the claims. Nothing in the claims is specific about a window glass of the vehicles. The recitation "suitable for use in a vehicular or architectural glazing element" is an intended use limitation and does not necessarily require the vehicular window glass to be part of the claims. Further, it is recognized that there is nothing wrong with the use of the Hutchison reflective film construction on the windows in the passenger sides of the vehicles because it would of course not interfere with the driver's ability to see through the windows.

Appellant resists that Hutchison is not combinable with Murphy because the two inventions do not exhibit functions that are consistent with each other. Since the board has confirmed that the functions of these two films are very much alike (page 6 of the 01/28/2005 Decision on Appeal), it is submitted that the teachings of the two references are properly combined in the rejection of the pending claims.

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# Examiner's comments on HUTCHISON, MURPHY AND BILKADI ET AL and CLAIM 6.

Appellant argues that Bilkadi discloses a retroreflective sheeting including a cured creamer layer, however, there is no teaching or suggestion in the Bilkadi reference of a laminate comprising at least two flexible nonadhesive polymeric material laminae and wherein the laminae has a thickness of at least about 5 mils, exhibits a light transmittance and is attached to window glass. There is no need for Bilkadi to address these issues since they are already taught in the Hutchison reference. Further, Appellant argues that there is no motivation or suggestion for combining the teachings of Hutchison, Murphy and Bilkadi. The examiner disagrees. Hutchison discloses a laminate 100 comprising a scratch-resistant fluorocarbon film 160 bonded to an acrylic pressure sensitive adhesive 150 (figure 1). Hutchison is silent as to a scratch-resistant ceramer coating. Bilkadi teaches the retroreflective sheeting comprising a ceramer coating which exhibits high levels of impact resistance, stain resistance and hardness (abstract). This is important to the expectation of successfully practicing the invention of Hutchison and thus suggesting the modification. Bilkadi discloses that the ceramer coating works well on polyacrylics adhesive (column 4, lines 12-13). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the ceramer coating with the scratch-resistant fluorocarbon film of Hutchison motivated by the desire to obtain a coating that exhibits higher levels of impact resistance, stain resistance and hardness.

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Appellant's reiterated positions taken with respect to the other rejections, the examiner's comments set forth above are equally pertinent in the support of these rejections as well. Further, since the scope of the present invention is not distinguishable from the scope of the claims on the first appeal and the Board has affirmed rejections over Hutchison in view of Murphy and Bilkadi, the rejections of the pending claims are sustained.

# Examiner's comments on HUTCHISON, MURPHY AND BIKADI ET AL. and CLAIM 12.

Appellant argues that there is no suggestion or motivation in either cited reference to replace a temporary polypropylene premask film as disclosed by Hutchison with a permanent cured creamer layer as described by Bilkadi. The arguments are not found persuasive for patentability because basis of obviousness from which the rejections was formulated has nothing related to the replacement of a temporary polypropylene premask film of Hutchison with a permanent cured creamer layer of Bilkadi as asserted by Appellant. Hutchison discloses a laminate having a construction in a following order: surface of solar energy/adhesive/polyester/polyester/adhesive/silver/adhesive/polyester (example 7). Hutchison teaches the polyester layer of the laminate being protected with a premask film prior to installation and during installation. Hutchison discloses the use of an acrylic pressure sensitive adhesive to bond the silver layer and the polyester. Hutchison discloses that the premask film may be applied onto the laminate to afford protection against handling prior to installation and during installation (example 8). Nothing in the

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Hutchison discloses or suggests that the premask film is a required component of the reflective film. Hutchison is silent as to a scratch-resistant ceramer coating. Bilkadi supplies the missing feature. Bilkadi teaches a retroreflective sheeting having an abrasion resistant creamer coating (abstract). Bilkadi teaches that the ceramer coating works well on polyacrylics adhesive (column 4, lines 12-13). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the ceramer coating as taught in Bilkadi on the outer surface of the laminate motivated by the desire to provide the laminate with excellent in abrasion resistance and outdoor durability. Accordingly, the art rejections are sustained.

# Examiner's comments on HUTCHISON, MURPHY AND TANAKA ET AL. and CLAIM 10.

Appellant's reiterated positions taken with respect to the other rejections, the examiner's comments set forth above are equally pertinent in the support of these rejections as well. Further, since the scope of the present invention is not distinguishable from the scope of the claims on the first appeal and the Board has affirmed rejections over Hutchison in view of Murphy and Bilkadi, the rejections of the pending claims are sustained.

# Examiner's comments on HUTCHISON, MURPHY AND YANG ET AL. and CLAIMS 14,15, 22 and 35.

Appellant's reiterated positions taken with respect to the other rejections, the examiner's comments set forth above are equally pertinent in the support of these rejections as well. Further, since the scope of the present invention is not

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distinguishable from the scope of the claims on the first appeal and the Board has affirmed rejections over Hutchison in view of Murphy and Bilkadi, the rejections of the pending claims are sustained.

### (11) Related Proceeding(s) Appendix

Copies of the court or Board decision(s) identified in the Related Appeals and Interferences section of this examiner's answer are provided herein.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

HV

**PRIMARY EXAMINER** 

Conferees:

Terrel Morris, SPE 1771 – TMC Carol Chaney, SPE 1773 &C

NOV 2 5 2005

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

### UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

S Harold C TORPORT !!!

OFFICE OF INTELLECTORPORT !!!

PROPERTY COUNSEL

3M INNOVATIVE PROPERTIES COMPANY

Ex parte PETER T. DIETZ

JAN 3 1 2005

MAILED

JAN 2 8 2005

U.S. PATENT AND TRADEMARK OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES Appeal No. 2005-0244 Application No. 09/591,584

REFERRED TO

ON BRIEF

HCIL - SAL

Before WALTZ, DELMENDO, and PAWLIKOWSKI, <u>Administrative Patent</u>
<u>Judges</u>.

WALTZ, Administrative Patent Judge.

DUE DATE(S)

DOCKETED.

#### DECISION ON APPRAL

This is a decision on an appeal from the primary examiner's final rejection of claims 1-11, 13-15, 17-22, 31-33, 35, 38 and 39. The remaining claims pending in this application are claims 12, 16, 23-30, 34, 36, 37 and 40. Claims 12, 16, 23, 30, 36 and 37 are allowed, as are claims 24-27, 34 and 40, and claims 28 and 29 are objected to as allowable but depending upon a rejected base claim (final Office action dated Oct. 27, 2003, pages 4-5; Brief, pages 1-2 and 4; and the Advisory Action dated Feb. 17, 2004). We have jurisdiction pursuant to 35 U.S.C. § 134.

According to appellant, the invention is directed to a laminate attached to window glass to provide a glazing element with reduced spall and lacerative consequences upon impact fracture of the window glass (Brief, page 2). A further understanding of the invention may be gleaned from illustrative independent claim 1 as reproduced below:

- 1. A laminate attached to window glass to provide a glazing element which has reduced spall and lacerative consequences on impact fracture of the window glass; said laminate comprising:
- (a) a first lamina comprised of visible light transmissive flexible nonadhesive polymeric material having a first major surface and an opposite second major surface;
- (b) a scratch-resistant layer over said first major surface to provide an exposed surface to the laminate;
- (c) at least one additional lamina comprised of visible light transmissive flexible nonadhesive polymeric material;
- (d) a sufficient number of layers in situ visible light transmissive pressure sensitive adhesive layers to bond said laminae together with the scratch-resistant layer exposed; and
- (e) a layer of in situ visible light transmissive ambient temperature attachable pressure sensitive adhesive to bond said laminate to window glass, wherein the total thickness of the laminate exceeds about 5 mils and the laminate exhibits a light transmittance.

Appellant states that the claims do not stand or fall together "as a whole," listing seven groups of claims (Brief, page 4). To the extent appellants provide specific, substantive arguments for the patentability of any individual claims,

we will consider these claims separately. See 37 CFR
§ 1.192(c)(7)(2003); In re McDaniel, 293 F.3d 1379, 1383,
63 USPQ2d 1462, 1465 (Fed. Cir. 2002).

The examiner relies upon the following references as evidence of obviousness:

Murphy	4,157,417	Jun.	05,	1979
Hutchison	5,118,540	Jun.	02,	1992
Bilkadi et al. (Bilkadi)	5,677,050	Oct.	14,	1997
Yang et al. (Yang)	6,013,722	Jan.	11,	2000
Tanaka et al. (Tanaka)	6,033,785	Mar.	07,	2000

The following rejections are before this merits panel in this appeal:

- (1) claims 1-5, 7-9, 11, 13, 17-21, 31-33, 38 and 39 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Hutchison in view of Murphy (Answer, page 3);
- (2) claim 10 stands rejected under section 103(a) over the references applied in rejection (1) further in view of Tanaka (Answer, page 5);
- (3) claim 6 stands rejected under section 103(a) over the references applied in rejection (1) further in view of Bilkadi (Answer, page 5); and
- (4) claims 14, 15, 22 and 35 stand rejected under section 103(a) over the references applied in rejection (1) further in view of Yang (Answer, page 6).

Based on the record as a whole, we affirm all of the rejections on appeal essentially for the reasons stated in the Answer and those reasons set forth below.

#### OPINION

#### A. Rejection (1)

The examiner finds that Hutchison discloses a reflective film mounted on a substrate where the film is constructed of a protective outer fluorocarbon film, a first layer of pressure sensitive adhesive (PSA), a silver layer, a biaxially oriented polyethylene terephthalate (PET) layer, a second layer of a PSA, a biaxially oriented PET layer, and a third layer of PSA, mounted on a support structure (Answer, page 3). The examiner further finds that Hutchison teaches that the reflective film is suitable for solar energy applications but does not disclose that the reflective film is attached to window glass (Answer, page 4). Therefore the examiner applies Murphy for the teaching of a similar reflective film attached to window glass to reduce the heat and glare of solar radiation (id.). From these findings, the examiner concludes that it would have been obvious to one of ordinary skill in the art at the time of appellant's invention to employ the reflective film disclosed by Hutchison with the window

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glass as taught by Murphy for the advantages of reduced heat and glare from solar radiation (id.).

Appellant argues that nowhere does Hutchison disclose, teach or suggest using his film in combination with window glass (Brief, page 5; Reply Brief, page 2). This argument is not persuasive. We note that Hutchison teaches the application of his film to "a flat, curved, and/or angular surface 214 of a support structure 210" (sentence bridging cols. 6-7), used in solar energy "applications," and this disclosure of "support structure" may be considered as generic to window glass (abstract; col. 1, 11. 18-19; Figure 7; and col. 7, 11. 41-46). Furthermore, we note that Murphy has been applied by the examiner to show the obviousness of combining the Hutchison film with window glass.

Appellant argues that there is no motivation or suggestion to combine Hutchison and Murphy since the films of these references have "diametrically opposed functions," namely the film of Hutchison functions to reflect visible light in addition to ultraviolet and infra-red while the Murphy film functions to transmit visible light while reducing ultraviolet light, infrared light and glare (Brief, page 6; Reply Brief, pages 4-5).

This argument is also not persuasive. As noted by the examiner (Answer, page 7), the solar control film of Hutchison is very similar in construction and materials to the solar control film set forth by Murphy. 1 Furthermore, we determine that the functions of these similar solar control films are not "diametrically opposed" but are very much alike. Hutchison teaches that "[t]o be efficient a reflective film must be highly specularly reflective to visible, ultraviolet, and/or near infrared light between about 300-2,500 nanometers" (col. 1, 11. 19-22). Although Hutchison teaches that some uv light will be transmitted by the thin layer of silver (col. 2, 11. 14-20), this reference also teaches that "[s]ilver reflects visible light better than aluminum" (col. 1, 11. 52-53). Therefore the teaching in Murphy that visible light is somewhat transmitted by the aluminum layer (col. 5, 11. 25-27) is not a "diametrically opposed function" but would have been suggested to one of ordinary skill in this art by the teachings of Hutchison. We note that Murphy teaches that the transmission of visible light, even with a thin aluminum layer, may be reduced by up to 90%

We note that Hutchison teaches the advantages of a silver metal layer over that of aluminum (col. 1, 11. 52-53; col. 2, 11. 14-20) while Murphy employs an aluminum layer but teaches that silver may be used (col. 1, 11. 36-54).

(col. 1, 11. 44-49; note that other metals such as silver are taught by Murphy at col. 1, 11. 49-54).

Appellant argues that Hutchison does not disclose, teach or suggest that one of his laminates is capable of passing the tests as required in claims 7, 13, and 17-21 (Brief, page 7; Reply Brief, page 7). This argument is not persuasive. The examiner has established a reasonable belief that the laminate of Hutchison will have the same or substantially the same properties as the claimed laminate, due to the similar materials and construction of layers (Answer, pages 8-9). Accordingly, the burden of proof has been shifted to appellant to prove that the laminates of the prior art do not have the properties set forth in the claims on appeal. See In re Spada, 911 F.2d 705, 708, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990); see also In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977).

Appellant argues that Hutchison does not disclose, teach or suggest that his acrylic PSA possesses a shear storage modulus falling within the limitations of claims 8 and 11 (Brief, pages 7-8; Reply Brief, pages 7-8). This argument is not well taken since Hutchison discloses that the acrylic PSA is, inter alia, "chosen based on its bonding properties" (col. 8, 11. 2-5). Accordingly, the determination of the optimum properties of the

acrylic pressure-sensitive adhesive would have been well within the ordinary skill of one in this art. See In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

For the foregoing reasons and those set forth in the Answer, we determine that the examiner has established a prima facie case of obviousness in view of the reference evidence. Based on the totality of the record, including due consideration of appellant's arguments, we determine that the preponderance of evidence weighs most heavily in favor of obviousness within the meaning of section 103(a). Therefore we affirm the rejection of claims 1-5, 7-9, 11, 13, 17-21, 31-33, 38 and 39 under section 103(a) over Hutchison in view of Murphy.

### B. Rejections (2), (3) and (4)

In each of the above rejections, the examiner relies on Hutchison and Murphy, as discussed above, with the additional citation of Bilkadi against claim 6, Tanaka against claim 10, and Yang against claims 14, 15, 22 and 25 (Answer, pages 5-7). We adopt the examiner's findings from the Answer and as discussed above.

Appellant argues that Bilkadi does not suggest forming the claimed laminate in combination with window glass, nor is there any motivation or suggestion in this reference to combine the

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teachings of Hutchison and Murphy (Brief, page 8). These arguments are not well taken since Bilkadi is not relied upon to teach the claimed laminate but only as evidence of other well known scratch-resistant coatings that work well with acrylic adhesives (Answer, page 6). The motivation to combine Hutchison and Murphy has previously been stated by the examiner (Answer, page 4).

Appellant argues that Tanaka "does not correct for the deficiencies of the combination of Hutchison and Murphy" (Brief, page 8). We rely upon our comments concerning Hutchison and Murphy discussed above and in the Answer.

Appellant argues that Yang does not provide any motivation or suggestion for combining the teachings of Hutchison and Murphy (Brief, page 9). Appellant further argues that Yang does not disclose a laminate of at least two polymeric material laminae bonded together where the laminate and window glass have a percent haze less than or equal to about 2.0% (id.). These arguments are not well taken. As discussed above, the examiner has established a proper motivation or suggestion to combine the teachings of Hutchison and Murphy (Answer, page 4). As correctly found by the examiner (Answer, page 6), Yang teaches that post-additive crosslinking agents added to an acrylate pressure-

sensitive adhesive produce adhesives with low haze, a desired feature in optical articles (Yang, abstract; col. 2, 11. 58-67; and col. 3, 1. 66-col. 4, 1. 11). Therefore the examiner has established that it would have been reasonable to one of ordinary skill in the art to add the crosslinkers taught by Yang for acrylate pressure-sensitive adhesives to the similar acrylic PSA of Hutchison to lower haze in the laminate. The optimum amount of additive would have been well within the ordinary skill in the art. See In re Woodruff, supra.

For the foregoing reasons and those stated in the Answer, we determine that the examiner has established a prima facie case of obviousness in view of the reference evidence in rejections (2), (3) and (4) as set forth above. Based on the totality of the record, including due consideration of appellant's arguments, we determine that the preponderance of the evidence weighs most heavily in favor of obviousness within the meaning of section 103(a). Accordingly, we affirm rejections (2), (3) and (4) as set forth above.

#### C. Summary

The rejection of claims 1-5, 7-9, 11, 13, 17-21, 31-33, 38 and 39 under section 103(a) over Hutchison in view of Murphy is affirmed. The rejection of claim 10 under section 103(a) over

Hutchison in view of Murphy and Tanaka is affirmed. The rejection of claim 6 under section 103(a) over Hutchison in view of Murphy and Bilkadi is affirmed. The rejection of claims 14, 15, 22 and 35 under section 103(a) over Hutchison in view of Murphy and Yang is affirmed.

The decision of the examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv)(effective Sep. 13, 2004; 69 Fed. Reg. 49960 (Aug. 12, 2004); 1286 Off. Gaz. Pat. Office 21 (Sep. 7, 2004)).

**AFFIRMED** 

THOMAS A. WALTZ

Administrative Patent Judge

ROMULO H. DELMENDO

Administrative Patent Judge

BOARD OF PATENT APPEALS

AND

INTERFERENCES

(Sweek & Vanishuse

BEVERLY A. PAWLIKOWSKI

Administrative Patent Judge

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